



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,769	07/01/2003	Dimitri Peter Zafiroglu	SWZ-007	2175

29626 7590 05/29/2007  
THE H.T. THAN LAW GROUP  
WATERFRONT CENTER SUITE 560  
1010 WISCONSIN AVENUE NW  
WASHINGTON, DC 20007

EXAMINER
----------

MATZEK, MATTHEW D

ART UNIT	PAPER NUMBER
----------	--------------

1771

MAIL DATE	DELIVERY MODE
-----------	---------------

05/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/611,769

Applicant(s)

ZAFIROGLU, DIMITRI PETER

Examiner

Matthew D. Matzek

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,3,6-9,11-13,15,21-25,56-66 and 68-92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,6-9,11-13,15,21-25,56-66 and 68-92 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/07.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/16/2007 has been entered.

***Response to Amendment***

2. The amendment dated 3/16/2007 has been fully considered and entered into the Record. Claims 1, 4, 5, 16-20, 26-34 and 67 have been canceled. New claims 69-92 have been added. The new claims contain no new matter. Claims 2, 3, 6-9, 11-13, 15, 21-25, 56-66 and 68-92 are currently active. Independent claims 56-59 have been amended to overcome the previously applied rejections based upon Ladeur (EP 0 547 533). Applicant has provided his own translation of the EP document, which be relied upon from here on out, because it appears to be more thorough and accurate. The figures of the Patent Office's translation will be relied upon as Applicant's translation has omitted them.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 1771

3. Claims 21, 56, 57, 60-62, 64-66, 68, 73, 74, 76 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladeur (EP 0 547 533) in view of Staunton (GB 1,194,886).

a. Ladeur teach a floor covering comprising a base fabric **1** (fibrous face layer) and pile fibers **2** that make up a face layer with a plurality of legs dependent said face layer (Abstract and Figures). The base or ground fabric **1** may be a nonwoven fabric. Said nonwoven may stitch-bonded or melt-blown and the nonwoven may be gathered (consolidated) (page 6). The tufted pile may be in the form of closed loops or as trimmed nap (page 8). The pile and nonwoven layers represent the claimed fibrous face layer. Below the face layer is an adhesive layer **3**. Applicant requires a solid adhesive film or fabric. Examiner takes the position that the adhesive layer of Ladeur serves as a film and that the final product has a solid adhesive layer and as such meets the claimed solid adhesive film or fabric. The pile is needled through the face layer (claim 1) and has downwardly facing fiber loops with free fiber ends that extend into the adhesive layer. The gathered fabrics of Ladeur provide for the undulated gathers of claim 57. It is highly desirable that the adhesive used to bind the facing and backing layers along with said layers are all of the same type of polymers so that the article remains recyclable (page 5). The disclosure of Ladeur does not specifically state that the adhesive layer penetrates the fibrous face layer.

- b. Staunton teaches a process of making tufted, needled or pile carpet fabrics. In his process the fibrous face layer is impregnated with polymeric resin before the application of a latex backing to allow for more efficient drying of the resin impregnated fabric (col. 1, lines 9-43).
- c. Since Ladeur and Staunton are from the same field of endeavor (i.e. carpets), the purpose disclosed by Staunton would have been recognized in the pertinent art of Ladeur.
- d. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have impregnated the fibrous face layer of Ladeur with the same resin that is used to make adhesive layer 3. This would result in an adhesive that is not only present as a solid layer 3, but also an adhesive that at least partially penetrates into the fibrous face layer and has legs of the face layer anchored into the adhesive layer. The impregnant and layer 3 would be of the same composition in order to maximize the article's recyclability, which is of primary concern to Ladeur. Claims 60-62 are rejected as the impregnant penetrates the face layer and cures due to the application of heat and pressure.
- e. Claim 73 is rejected as layer 6 is a backing layer. The applied reference teaches the use of pile-forming yarns and as such the Examiner takes the position that this teaching encompasses reverse-pile fabrics. Claim 74 is rejected as the combined article is capable of being embossed. Claim 22 is

rejected as Ladeur teaches that it is well known to needle the top layer through all of layers as a means to connect the layers.

f. The disclosure of Staunton is silent as to the depth that the adhesive layer penetrates into the fibrous face layer. The depth of the adhesive penetration is a result-effective variable effecting structural integrity of the fabric face layer.

Consequently, absent a clear and convincing showing of unexpected results demonstrating the criticality of the adhesive depth, it would have been obvious to one of ordinary skill in the art to optimize this result-effective variable by routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

4. Claims 2, 3, 6, 7, 58, 63, 71, 72, 75, 79-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladeur (EP 0 547 533) in view of Staunton as applied to claim 56 above, and further in view of Sissons (US 3,347,736). The disclosures of Ladeur and Staunton are silent as to the use of woven fabric in the face layer and needling density.

a. Sissons teaches a reinforced needled pile fabric with a reinforcing woven fabric within the pile layer (col. 3, lines 35-44). Example 5 uses fibers with a denier of 3. Example 1 uses a needling density of 600 punches per square inch. Sissons uses fabric face layers that range from 6-15 ounces per square yard (203-509 gsm) a thickness of half an inch (col. 8, lines 8-15).

b. Since Ladeur and Sisson are from the same field of endeavor (i.e. floor coverings), the purpose disclosed by Sisson would have been recognized in the pertinent art of Ladeur.

c. It would have been obvious to one ordinary skill in the art at the time the invention was made to have replaced the nonwoven layer of Ladeur with the woven layer of Sissons motivated by imparting the pile fabric with strength and dimensionally stability (col. 3, lines 35-44, Sissons).

d. The needling density of punches per square inch and fibrous face layer thickness are result-effective variables feel and appearance of the carpeting fabric. Consequently, absent a clear and convincing showing of unexpected results demonstrating the criticality of the claimed needling density, it would have been obvious to one of ordinary skill in the art to optimize these result-effective variables by routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

5. Claims 8, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladeur (EP 0 547 533) in view of Staunton (GB 1,194,886) as applied to claim 57 above, and further in view of Zafiroglu et al. (US 6,269,759). The disclosures of Ladeur and Staunton are silent as to the stitch-bonded and bulked fabrics in the fibrous outer layer.

a. Zafiroglu et al. teach the creation of pile fiber carpet using stitch-bonded and bulked fabrics with a loop frequency of 12 per inch (Example 1). The stitches may be arranged to create various patterns or surface effects (col. 13, lines 1-5). The illustrated loops of Figure 5c read on the "gathered fabric" limitations as they appear to be structurally similar.

b. Since Ladeur and Zafiroglu et al. are from the same field of endeavor (i.e. pile carpet), the purpose disclosed by Zafiroglu et al. would have been recognized in the pertinent art of Ladeur.

c. It would have obvious at the time the invention was made to a person having ordinary skill in the art to modify the article Ladeur with the fabrics of Zafiroglu et al. motivated by the creation of an aesthetically pleasing article.

6. Claims 9, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladeur (EP 0 547 533) in view of Staunton (GB 1,194,886) and Zafiroglu et al. (US 6,269,759) as applied to claims 8 and 57 above, and further in view of view of Murata et al. (US 4,576,840). The disclosures of Ladeur, Staunton and Zafiroglu are silent as to the use of shrinkable pile fabrics.

a. Murata et al. teach a pile fiber composition comprising shrinkable pile fibers in the creation of a woven or knitted pile fabric.

b. Since Ladeur and Murata et al. are from the same field of endeavor (i.e. fabrics comprising pile fibers), the purpose disclosed by Murata et al. would have been recognized in the pertinent art of Ladeur.

c. It would have obvious at the time the invention was made to a person having ordinary skill in the art to modify the article Ladeur with a woven or knitted carpet of shrinkable fibers motivated by the use of conventional techniques within carpet making with the desire to create an article with outstanding appearance and feel (Murata et al. Abstract).

Art Unit: 1771

7. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladeur (EP 0 547 533) in view of Staunton (GB 1,194,886) as applied to claim 56 above, and further in view of Allison et al. (US 2003/0099810). The disclosures of Ladeur and Staunton are silent as to the use of a spunlaced fabric for the fabric layer, through which the fabric is needled.

a. Allison et al. teach the creation of carpeting for vehicles that comprises a primary layer **12** that may be a spunlaced fabric [0024].

b. Since Ladeur and Allison et al. are from the same field of endeavor (i.e. carpets), the purpose disclosed by Allison et al. would have been recognized in the pertinent art of Ladeur.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to have made the article of Ladeur with a the spunlaced fabric layer of Allison et al. The skilled artisan would have been motivated by the desire to create an article with added stability provided by the spunlaced fabric.

8. Claims 59, 69, 70, 78, 86-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ladeur (EP 0 547 533) in view of Staunton (GB 1,194,886) and Sissons (US 3,347,736) as applied to claim 58 above, and further in view of Kimbrell, Jr. et al. (US 6,866,923 B2). The disclosures of Ladeur, Staunton and Sissons are silent as to the sanding and shearing of the woven face fabric.

Art Unit: 1771

- a. Kimbrell, Jr. et al. teach that the shearing and cutting of the fabric face of textiles results in desirable appearance, strength and/or hand (col. 12, lines 12-31). The textile may be used for carpeting (col. 51, lines 44-55).
- b. Since Ladeur and Kimbrell, Jr. et al. are from the same field of endeavor (i.e. carpets), the purpose disclosed by Kimbrell et al. would have been recognized in the pertinent art of Ladeur.
- c. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the article of Ladeur with the sanded or sheared fabric of Kimbrell, Jr. et al. motivated by the desire to impart the article with desirable appearance, strength and/or hand (col. 12, lines 12-31).

#### ***Response to Arguments***

9. Applicant's arguments with respect to claims 2, 3, 6-9, 11-13, 15, 21-25, 56-66 and 68-92 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is 571.272.2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571.272.1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
ELIZABETH M. COLE  
PRIMARY EXAMINER

mdm

MDM